

APPENDIX 8.1F

Mitigation

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Table 8.1F-1 presents the mitigation required for the project, based on the SCAQMD's regulations. Emissions shown in Table 8.1F-1 reflect only those offset requirements directly resulting from the SCAQMD's New Source Review permitting programs – Regulation XIII for VOC, CO, SO₂, PM₁₀ and Rule 2005 for NO_x. Since the VOC, CO, SO₂ and PM₁₀ emission reduction credit (ERC) requirements will be greater for normal operation, as shown in Table 8.1F-1, only the normal operation offset requirements are shown above. Since NO_x emission offset requirements are based on actual emissions, both the RECLAIM Trading Credits (RTC) requirement for the commissioning phase and the normal operations are shown. ERC and RTCs calculated on the basis of 31 days per month, with RTCs assuming twelve 31-day months.

The AESH facility will participate in the NO_x RECLAIM program. The New Source Review Rule requiring the offsets for AESH is the SCAQMD Rule 2005. Rule 2005 requires that sufficient RTCs be obtained to offset actual emissions for the first year of operation as a condition of receiving a permit under the NO_x RECLAIM program. Each RTC represents a discreet pound of NOx and is valid only for the year of issue. The SCAQMD's RECLAIM program is divided into two cycles, Cycle 1 (January-December) and Cycle 2 (July-June). Likewise, RTCs are issued as Cycle 1 or Cycle 2 and the valid year to use them follows the corresponding January-December or July-June compliance period. There are two trading Zones within the RECLAIM program, known as Zone 1 or the Coastal Zone and Zone 2 or the Inland Zone. RTCs are designated as either Coastal or Inland. Coastal RTCs can be used by facilities in either the Coastal or Inland trading zones, but Inland RTCs can only be used by facilities in the Inland trading zone.

Table 8.1F-1 shows the NOx RTC requirement projected for the Commissioning phase and also projected for each year of normal operation of the AESH Project. As a project located in the Inland Trading Zone, the project will be eligible to use RTCs issued as both Coastal and Inland. AES plans to use excess Coastal Zone RTCs that it holds and to solicit RTCs from credit holders in the both Zones to satisfy the NO_x offset requirement.

TABLE 8.1F-1
NSR Emissions Offsets Required^a

Pollutant		RTCs ^b (lb)	ERCs ^c (lb/day)	Priority Reserve ^d (lb/day)
NO _x	First Year Project Emissions ^e	212,144		
	Normal Project Emissions	183,518		
VOC	Normal Project Emissions		138.6	
CO ^f	Normal Project Emissions			814.9
SO ₂	Normal Project Emissions			33.2
PM ₁₀ ^g	Normal Project Emissions			333.3

- ^a Project emissions offset requirements for each phase of the project operation, including Commissioning and Normal Operation.
- ^b Proposed AES Highgrove facility will enter the SCAQMD NO_x RECLAIM program (Regulation XX). NO_x emissions will be offset through purchase of RTCs at a ratio of 1:1 to actual emissions per year.
- ^c ERCs are emission offset credits issued as a stream of credits in units of lb/day. In Rule 1303, these credits are to be provided when offset thresholds, listed in Rule 1304 are exceeded and are to be provided at an offset ratio of 1.2 lb/day of ERCs per lb/day of emissions increases.
- ^d Priority Reserve Credits are supplied by the SCAQMD as emission offsets for essential public services (schools, sewage plans, landfills, etc.) under Rule 1309.
- ^e First year = 12 months of emissions plus commissioning emissions.
- ^f CO Offsets may not be required if SCAQMD is redesignated attainment for the 8-hr CO ambient air quality standard. A redesignation request is pending.
- ^g Because the cooling towers will be exempted from SCAQMD permitting requirements by Rule 219(e)(3) and Rule 219(s)(2), emission offsets are not required as indicated in Rule 1304(d)(3). In accordance with Rule 1303 and Rule 1309.1, ERCs are required at an offset ratio of 1.2:1.

The SCAQMD promulgated rule changes to Rule 2002 in January 2005 that will “shave” 7.7 tons per day or approximately 22.5 percent by the 2010 compliance year from the present 34.2 tons per day of NO_x RTCs in the trading universe (Reference Figure 8.1F-1, which is taken from a February 2, 2005 SCAQMD RECLAIM presentation). Nevertheless, RTCs have readily been available when needed by projects and there is no anticipated problem in acquiring sufficient NO_x RTCs to offset actual NO_x emissions from the AESH Project. Note also that the January 2005 amendments to the RECLAIM program and the RECLAIM rules under Regulation XX extended the program to the 2028 compliance year.

Table 8.1F-2, included with this Appendix, is a listing of current SCAQMD ERCs and credit holders. Similar to the RECLAIM program, note that as a proposed project in the Inland Trading Zone, ERCs designated as either Coastal or Inland ERCs can be used to offset criteria pollutant emissions. AES has been aggressively pursuing CO, VOC, SO₂ and PM₁₀ ERCs from the open market through the existing emission credit broker network that has developed in the South Coast Air Basin.

In addition to Emission Reduction Credits or ERCs, the SCAQMD maintains a separate pool of emissions credits, known as Priority Reserve Credits. Priority Reserve Credits are reserved as emission offsets for essential public services (schools, sewage plans, landfills, etc.) under Rule 1309. During the power crisis that occurred in 2000-2001, the SCAQMD amended Rule 1309.1 to provide access for Priority Reserve Credits for new electrical generating facilities. This access has expired and recognizing that there is a critical need to site additional

electrical generating facilities, the SCAQMD has been developing a rule amendment to Rule 1309.1 that will again allow electrical generating facilities access to the Priority Reserve pool of credits. The SCAQMD has issued proposed amendments to Rule 1309.1, and currently plans on having the amendments considered for adoption at the July 2006 Governing Board Meeting. Similar to ERCs, the proposed Rule 1309.1 amendments would require that Priority Reserve Credits be used at an offset ratio of 1.2:1 for new electrical generating facilities. At this time, Priority Reserve Credit access is planned for SO₂ and PM₁₀, with CO under consideration. Prices for purchase of these credits are listed in the proposed rule amendments as \$50,417 for PM₁₀, \$15,083 for SO_x and \$12,000 for CO. Since there are insufficient PM₁₀ ERCs available to satisfy the offset needs of this project and limited SO₂ and CO ERCs available, AES plans to complete the acquisition of its PM₁₀, CO and SO₂ offsets through the Priority Reserve Credit availability.

Non-New Source Review Emissions Increases

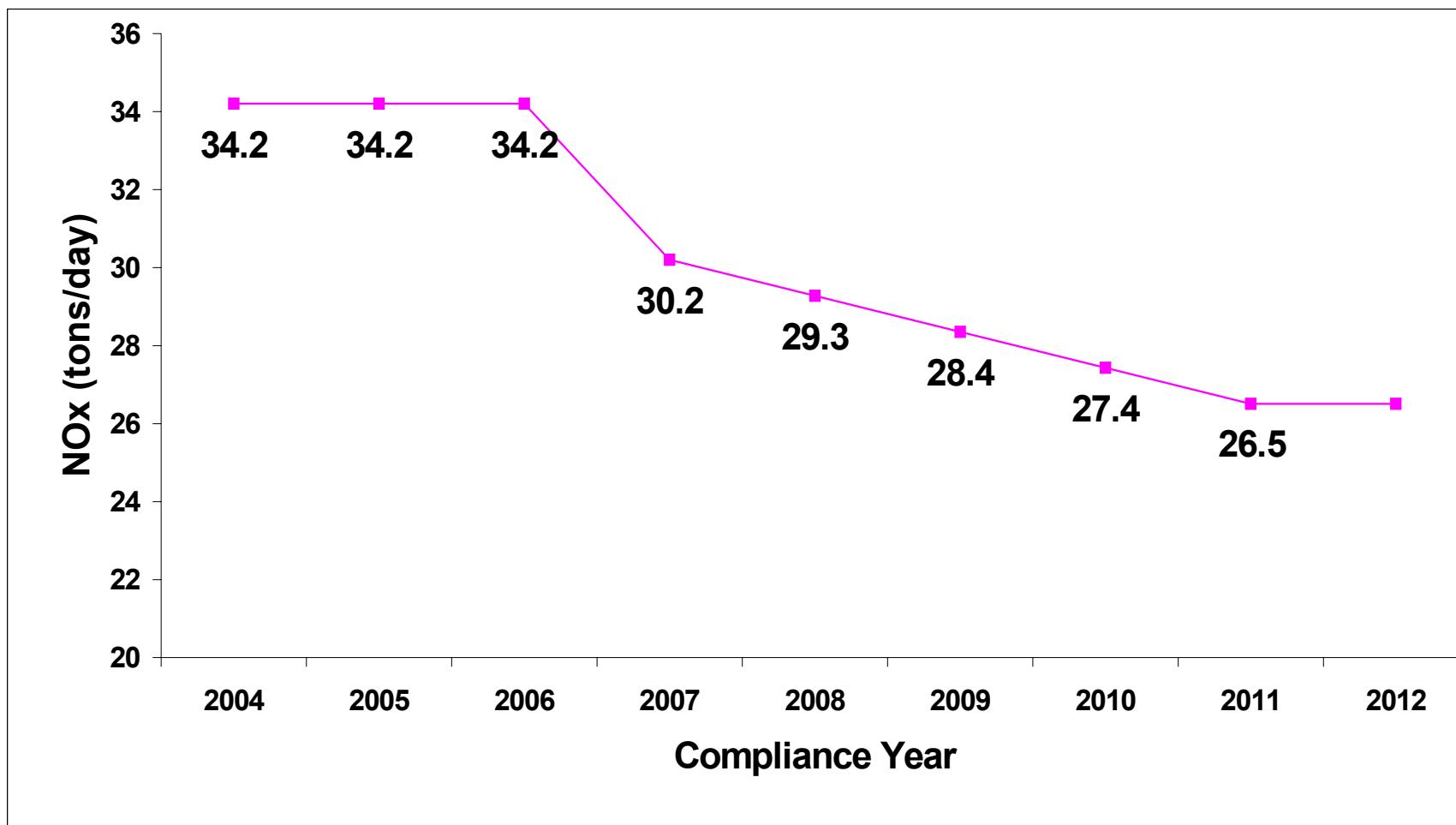
Currently, the cooling towers are exempted from SCAQMD permitting requirements by Rule 219(e)(4) and 219(s)(2). Rule 219(s)(2) is the requirement that the cooling towers not exceed the risk thresholds in SCAQMD Rule 1401 (Toxic New Source Review) as a condition of maintaining the permit exemption provided in Rule 219(e)(4). As the cooling towers are using non-contaminated groundwater, not toxic air contaminants are expected and the facility risk is well below the Rule 1401 permit exemption levels, thereby confirming the exemption status of the cooling towers. However, the CEC, as the CEQA Lead Agency, does traditionally require mitigation of these emissions. The SCAQMD Governing Board will consider proposed amendments to Rule 219 at its May 5, 2006 meeting. These amendments would remove the permit exemption for sources, such as the cooling towers if potential emissions exceed four tons per year. Since the AESH cooling towers will individually and collectively have potential PM₁₀ emissions well below the four ton per year threshold, it is not anticipated that this rule amendment would have any affect on cooling tower permit applicability.

Priority Reserve Credits are purchased or transferred to a project at a ratio of 1.2:1 (under the proposed rule) with average 30-day emissions. The precedent has been set to use this excess 20 percent emission credit deposit as the CEQA mitigation for the cooling tower PM₁₀ emissions. It is the intent of AES to likewise request that the extra emissions deposited by the SCAQMD be used as satisfaction of the CEQA mitigation requirement.

TABLE 8.1F-3
Non-NSR Emission Increases (lb/day)*

	NO _x	CO	VOC	SO ₂	PM ₁₀
Cooling tower	0	0	0	0	2.3
Total	0	0	0	0	2.3

* Basis of average daily emissions over maximum 30-day period.



Source: SCAQMD Presentation - Public Informational Workshop, Amendments to RECLAIM Rules, February 2, 2005

FIGURE 8.1F-1
SCAQMD NO_x RECLAIM Program RTC Allocations for 2004 and On

Table 8.1F-2
LIST OF ACTIVE SCAQMD ERCs - MARCH 2006

FAC ID	ERC NBR	COMPANY NAME	ADDRESS	CITY	ZIP	EMITTANT	AMOUNT	Zone	ISSUED
141891	AQ005753	AES HIGHGROVE, LLC	12700 TAYLOR ST	GRAND TERRACE	92313	SOX	40	Inland	6/21/2005
101337	AQ006042	NATIONAL OFFSETS	6251 PARAMOUNT BLVD	LONG BEACH	90248	SOX	46	Coastal	2/16/2006
121727	AQ005364	PACIFIC PIPELINE SYSTEM LLC	5900 CHERRY AVE	LONG BEACH	90805	SOX	47	Coastal	5/12/2004
800075	AQ004499	LA CITY, DWP SCATTERGOOD GENERATING STN	12700 VISTA DEL MAR	PLAYA DEL REY	90293 8599	SOX	50	Coastal	5/10/2002
29110	AQ006041	ORANGE COUNTY SANITATION DISTRICT	22212 BROOKHURST ST	HUNTINGTON BEACH	92646 8457	SOX	54	Coastal	2/16/2006
121727	AQ005363	PACIFIC PIPELINE SYSTEM LLC	5900 CHERRY AVE	LONG BEACH	90805	SOX	75	Coastal	5/12/2004
800305	AQ001441	UCLA	705 SO DR	LOS ANGELES	90024 8315	SOX	106	Coastal	4/19/1995